

AMENDMENTS TO THE CLAIMS

Please amend claims 1 and 5, cancel claim 8, and add claims 35-47.

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An electrical power supply for a thermokeratoplasty tip that can provide an indication of an electrical characteristic of a cornea, comprising:

an electrode pin;

a return pin; and,

a circuit that can provide a current to said electrode pin and the cornea, and an indication of the electrical characteristic of the cornea in response to the current flowing through the cornea and said electrode and return pins, said circuit varies an amplitude of said current in accordance with the electrical characteristic.
2. (Original) The power supply of claim 1, wherein the electrical characteristic is a function of a voltage at said return pin.
3. (Original) The power supply of claim 2, wherein the electrical characteristic is a time rate of change of the voltage at said return pin.
4. (Original) The power supply of claim 1, wherein said circuit provides a series of radio frequency test pulses to said electrode pin.

5. (Currently Amended) The power supply of claim ~~43~~, wherein a number of radio frequency test pulses is less than a number of radio frequency operating pulses applied to the cornea.

6. (Original) The power supply of claim 1, wherein said circuit provides a wet indicator output signal if the electrical characteristic is equal to or less than a lower threshold value and provides a dry indicator output signal if the electrical characteristic is equal to or greater than an upper threshold value.

7. (Original) The power supply of claim 1, wherein said circuit provides a series of operating radio frequency pulses if the electrical characteristic is greater than ~~at the~~ lower threshold and less than ~~an~~ the upper threshold.

8. (Cancelled) ~~The power supply of claim 1, wherein said circuit varies an amplitude of said operating radio frequency pulses in accordance with the electrical characteristic.~~

9. (Original) A method for testing an electrical contact between a thermokeratoplasty electrode, a cornea and a return element, comprising:
transmitting a current through the electrode, the cornea and the return element;
comparing an electrical characteristic of the cornea to a threshold value; and,
generating an indicator output signal if the electrical characteristic is equal to or is greater than an absolute value of the threshold value.

10. (Original) The method of claim 9, providing a series of radio frequency operating pulses if the electrical characteristic is less than the absolute value of the threshold value.

11. (Original) The method of claim 10, varying an amplitude of the radio frequency operating pulses in accordance with the electrical characteristic.

12. (Original) The method of claim 9, wherein the electrical characteristic is a time rate of change of a voltage of a return pin.

13. (Original) The method of claim 9, wherein a wet indicator output signal is generated if the voltage characteristic is equal to or less than a lower threshold value, and a dry indicator output signal is generated if the electrical characteristic is equal to or greater than an upper threshold value.

14. (Canceled)

15. (Canceled)

16. (Canceled)

17. (Canceled)

18. (Canceled)

19. (Canceled)

20. (Canceled)

21. (Canceled)

22. (Canceled)

23. (Canceled)

24. (Canceled)

25. (Canceled)

26. (Canceled)

27. (Canceled)

28. (Canceled)

29. (Canceled)

30. (Canceled)

31. (Canceled)

32. (Canceled)

33. (Canceled)

34. (Canceled)

35. (New) An electrical power supply for a thermokeratoplasty tip that can provide an indication of an electrical characteristic of a cornea, comprising:

an electrode pin;

a return pin; and,

a circuit that can provide a current to said electrode pin and the cornea, and an indication of the electrical characteristic of the cornea in response to the current flowing through the cornea and said electrode and return pins, said circuit provides a series of radio frequency test pulses to said electrode pin.

36. (New) The power supply of claim 35, wherein the electrical characteristic is a function of a voltage at said return pin.

37. (New) The power supply of claim 36, wherein the electrical characteristic is a time rate of change of the voltage at said return pin.

38. (New) The power supply of claim 35, wherein a number of radio frequency test pulses is less than a number of radio frequency operating pulses applied to the cornea.

39. (New) The power supply of claim 35, wherein said circuit provides a wet indicator output signal if the electrical characteristic is equal to or less than a lower threshold value and provides a dry indicator output signal if the electrical characteristic is equal to or greater than an upper threshold value.

40. (New) The power supply of claim 35, wherein said circuit provides a series of operating radio frequency pulses if the electrical characteristic is greater than the lower threshold and less than the upper threshold.

41. (New) An electrical power supply for a thermokeratoplasty tip that can provide an indication of an electrical characteristic of a cornea, comprising:

an electrode pin;

a return pin; and,

a circuit that can provide a current to said electrode pin and the cornea, and an indication of the electrical characteristic of the cornea in response to the current flowing through the cornea and said electrode and return pins, said circuit provides a wet indicator output signal if the electrical characteristic is equal to or less than a lower threshold value

and provides a dry indicator output signal if the electrical characteristic is equal to or greater than an upper threshold value.

42. (New) The power supply of claim 41, wherein the electrical characteristic is a function of a voltage at said return pin.

43. (New) The power supply of claim 42, wherein the electrical characteristic is a time rate of change of the voltage at said return pin.

44. (New) The power supply of claim 41, wherein said circuit provides a series of operating radio frequency pulses if the electrical characteristic is greater than the lower threshold and less than the upper threshold.

45. (New) An electrical power supply for a thermokeratoplasty tip that can provide an indication of an electrical characteristic of a cornea, comprising:

an electrode pin;

a return pin; and,

a circuit that can provide a current to said electrode pin and the cornea, and an indication of the electrical characteristic of the cornea in response to the current flowing through the cornea and said electrode and return pins said circuit provides a series of operating radio frequency pulses if the electrical characteristic is greater than a lower threshold and less than an upper threshold.

46. (New) The power supply of claim 45, wherein the electrical characteristic is a function of a voltage at said return pin.

47. (New) The power supply of claim 46, wherein the electrical characteristic is a time rate of change of the voltage at said return pin.